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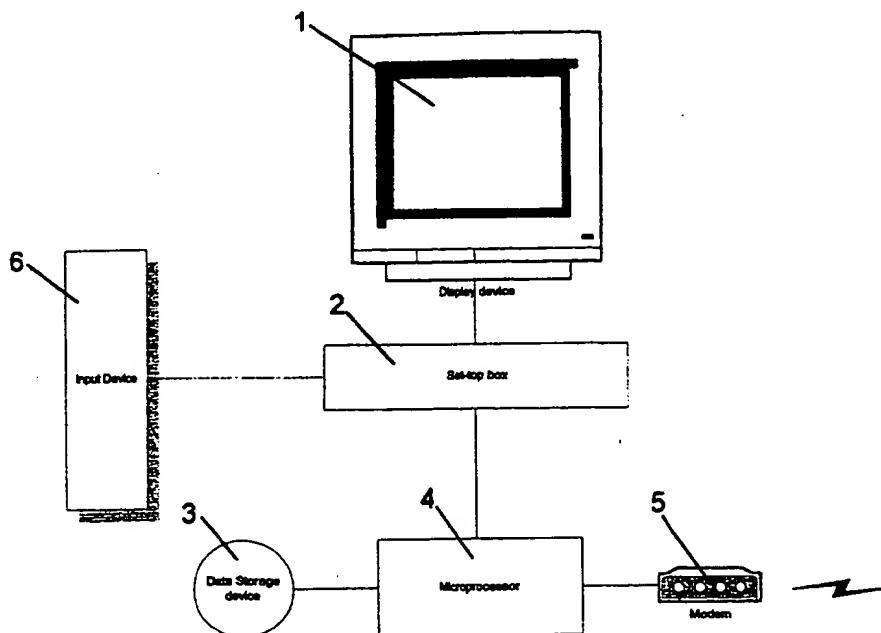
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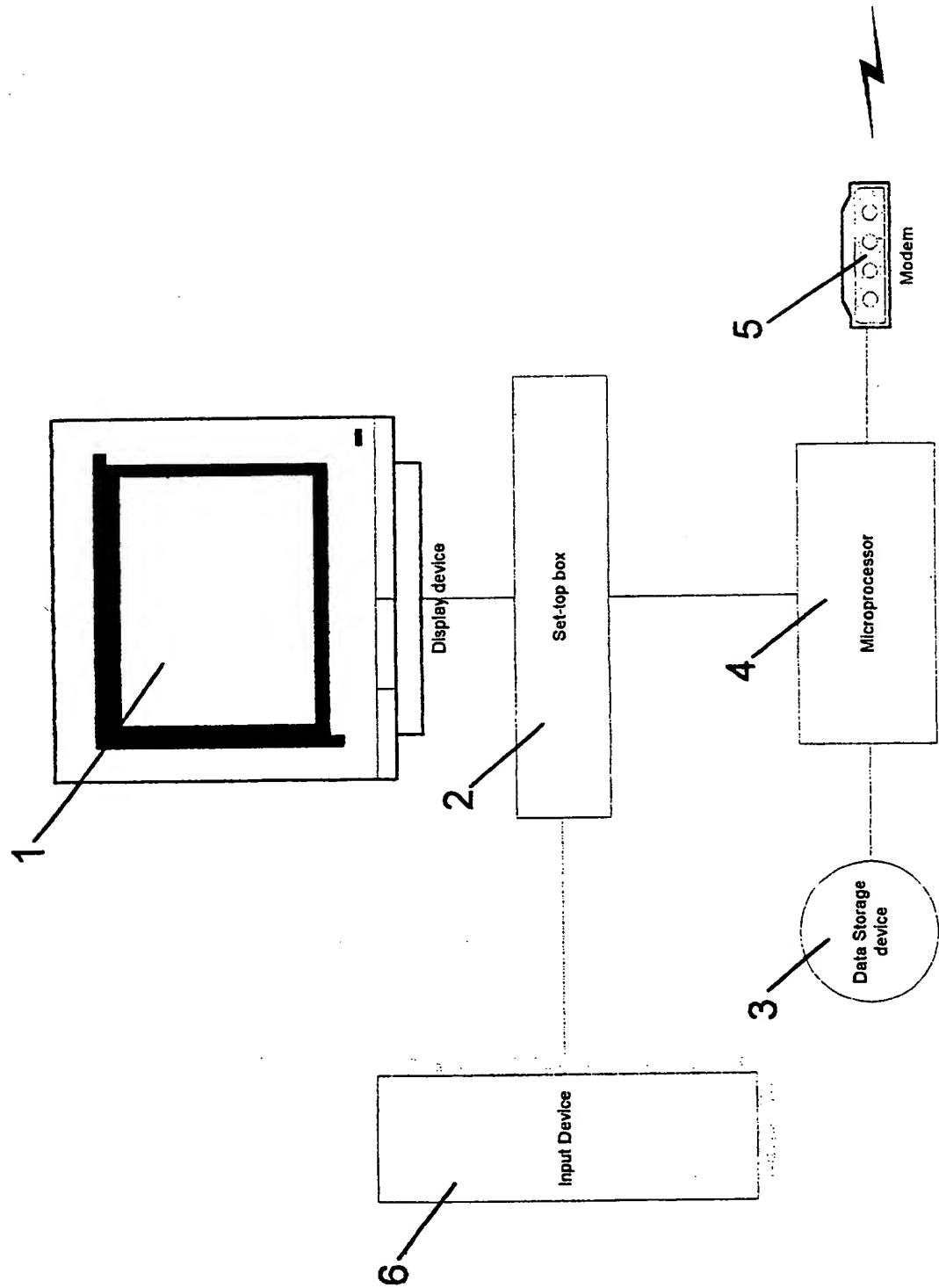
(54) Abstract Title

Premium rate telephone number payment system

(57) To permit payment for electronically distributed services provided by a supplier via TV, videotext or via a satellite, cable or digital terrestrial broadcast service, a computer system 3,4 is coupled to or integrated with a set top box 2 connected to a TV receiver or video monitor 1 and is connected to a telephone modem 5 and user operable remote control unit 6. On command to receive a service, the system initiates provision of the service and via the modem, automatically dials a specified premium rate telephone number. This generates a payment for the benefit of the service supplier.



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Online payment system

The present invention relates to an online payment system used for the purchase of goods, services or entry into an online competition.

In online services, such as interactive TV, the Internet and videotext, billing is conventionally carried out by the use of credit cards, charge cards, debit cards or pre-payment schemes.

These conventional billing systems have restrictions and limitations; for example, gaming and betting laws do not allow payment for entry into some competitions using any form of credit. Competition entry fees may be low in cost, thereby making credit, charge, debit card or prepayment scheme's uneconomical due to administration costs. Pre-payment billing means that potential customer's cannot purchase goods or services or enter online games or competitions without having pre-arranged, pre-paid for these goods or services. A reasonably large percentage of the population does not have the use of a debit card, credit card or charge card; therefore the goods suppliers, service providers and competition operators are losing potential sales every day.

Many people today are still reluctant in making online payments with their credit, charge or debit cards due to the fear of fraud.

The object of this invention is to allow the online purchase of goods, services or entry into an online game or competition, without the use of a credit card, charge card or pre-payment scheme's.

According to one aspect of the invention, there is provided apparatus for making available to a user an electronically distributed service provided by a supplier, the apparatus comprising: -receiver means including a display device for displaying information to said user; connection means for enabling the apparatus to be connected to a telephone network; signalling means for enabling the user to provide a signal for indicating a requirement to receive a service; and control means which is operable for receiving said signal and, via said connection means, to initiate billing for said service by causing the apparatus automatically to call a premium rate telephone service made available by the operator of the network for the benefit of the supplier.

According to a second aspect of the invention, there is provided auxiliary apparatus for use in association with a television receiver or video monitor to make an electronically distributed service available to a user, the auxiliary apparatus comprising a computer system and respective

means for connecting the apparatus to said television receiver or video monitor, to a telephone line and to a user operable signaling means, the auxiliary apparatus being operable for: - displaying information about said service on the screen of the television receiver or video monitor; receiving via the said signaling means a signal indicative of a requirement to receive said service; responding to said signal to initiate provision of said service and the automatic dialing of a premium rate telephone number for resulting in payment for said service.

According to a second aspect of the invention, there is provided a method for causing television apparatus to become operable to for enabling a service provider to charge for the provision of an electronically distributed service, the apparatus comprising a computer system and respective means for connecting the apparatus to a television receiver or video monitor, to a telephone line and to user operable signaling means, and the method comprising downloading programming data to the computer system to cause the apparatus to become operable for displaying information about said service on the screen of the television receiver or video monitor, receiving a signal from the signaling means indicative of a requirement by the user to receive said service, and responding to said signal to initiate the provision of said service and automatically dials a premium rate telephone number for resulting in a payment for said service.

The present invention relates to the method and apparatus for an online billing system. In this specification the term online billing refers to an online billing system that automatically bills the customer for the goods, services or entry into an online game or competition by being automatically connected to a premium rate service through a network provider.

In one aspect of this invention the premium rate service maybe on a telephone network.

In this specification the term Interactive TV refers to a television receiving device that has the means to receive broadcast programmes and the means operable by a viewer to interact with the said broadcast programmes.

For the purposes of this specification the word "interact" includes, but is not limited to mean participate, play, (game / competition), request (services/ goods), select, choose or the like.

In this specification the term online refers to any means of communication for receiving and / or displaying information and/or services stored remotely and accessible to a user by means of a wired or wireless communication.

The apparatus may be connected to or be integral to a set-top box, computer, television or any other device that has the ability to offer online goods, services or the entry into an online game or competition. When the customer decides to

make a purchase, request an online service or enter an online game or competition he simply selects the appropriate service, goods game or competition he requires by means of a keyboard, mouse, remote control unit or the like. Upon his approval the apparatus then automatically connects either to a predefined or otherwise specified premium rate service.

The apparatus may have the means to connect, retrieve, transmit and verify authentication data from a remote computer during this connection. This authentication data may be encrypted and / or compressed in order to prevent fraud.

The apparatus may also have the means to restrict access to the online billing services or online competitions by means of a PIN (personal identification number) or other access control system or combination thereof.

In another embodiment, a player makes at least one selection to enter an online competition. This competition may be a competition of skill, chance, draw, bet or the like. The player's selection data (entry) is then automatically submitted to the competition operator using a premium rate service provided by a network provider, wherein part of the cost of the submission of the data to the competition operator, is the cost of the competition entry fee. This network may be a telephone, cable, satellite, data, radio or fibre optic network or the like.

This competition may be available to the player by means of Interactive TV, the Internet, videotext or other online interactive service.

The player's identity and other information may also be submitted with the competition selection data, for purposes of security, prize notification, delivery or a combination thereof. This prize may be goods, cash, vouchers, tickets or the like.

A preferred embodiment of the present invention will now be described by way of example only with reference to the accompanying illustration, which is a block diagram of the components and operable parts necessary to this particular embodiment of the present invention.

A unit of the example depicted comprises a microprocessor 4, which controls all other components, a display device 1, in this case, a television, monitor or other display device, for the display of graphics and information from the set-top box 2. A modem 5 to connect to a network operator, a data storage device 3, EPROM, hardisk, CDROM or the like or other recording media or combination thereof. Which in this example stores the all graphics, software and data. This data storage device 3 may be altered or the like in order to provide new graphics, data or software programs, when the need arises.

In one embodiment of the invention the input device 6 is a remote control unit allowing the user to interact with the set-top box by selecting the appropriate buttons.

The unit in this embodiment is connected to a set-top box, which is connected to an online service provider, by means of a satellite dish, aerial, telephone, cable or other network.

When an online purchase is required, the customer selects from the display device 1 the service, goods he would like to purchase, or his competition entry by means of the input device 6. The Microprocessor 4 is sent a signal from the set-top box 2, and the program stored on the data storage device 3, instructs the microprocessor 4 to connect to a premium rate service using the modem 5. The premium rate service to be connected to, can be either stored on the data storage device 3, or can be retrieved from data supplied by the online service provider, or the competition operator.

The network operator makes a charge to the customer the moment modem 5 makes a connection, to a premium rate service through the network operator. Part of the cost for this connection is for the goods, services or competition entry fee, in course of, or as a direct or indirect consequence of the connection.

The premium rate service may redirect the connection to a predefined or otherwise specified remote online computer or the like. Which when connected to, may automatically receive and /or transmit authentication data back to Modem 5, which retrieves the data and sends it to the microprocessor 4, which decrypts, decompresses and verifies its authenticity, by means of programs stored on data storage device 3. The programs, graphics, and data on the data storage device 3 may be updated or otherwise amended locally or remotely, as and when the need arises.

This authentication data may also be stored on data storage device 3, for use later.

Once the data has been processed, the microprocessor 4 sends a signal to the set-top box 2, which then provides the customer with the online services purchased or confirms an order for goods placed or confirms the selections and entry into a competition, on display device 1.

The customer's details (name, address, etc.) may be transmitted to a remote online computer or other online device.

The apparatus may have the means to restrict access to the network provider by means of a PIN or other access control system or the combination thereof.

In an another example of the present invention user interaction may be employed in addition to or instead of the remote control unit such as a mouse, keyboard rollerball, joystick or the like.

In another example the apparatus may be used for the submission of a user's competition entry data to a competition operator via a network operator, wherein part of the cost of transmitting the competition entry data (entering the competition), through a network operator to the competition operator is the cost for the entry into the competition.

In an another example of the present invention the set-top box may be a personal computer equipped to have online services and be connected to or have the means to connect to a network provider

Therefore it is to be understood that the present invention can be embodied in a variety of ways other than specifically stated or depicted herein, without departing from the scope of the present invention.

Claims

- 1 Apparatus for making available to a user an electronically distributed service provided by a supplier, the apparatus comprising: - receiver means including a display device for displaying information to said user; connection means for enabling the apparatus to be connected to a telephone network; signaling means for enabling the user to provide a signal for indicating a requirement to receive a service; and control means which is operable for receiving said signal and, via said connection means, to initiate billing for said service by causing the apparatus automatically to call a premium rate telephone service made available by the operator of the network for the benefit of the supplier.
- 2 Apparatus according to claim 1, wherein the apparatus is operable to make available a plurality of electronically distributed services, said receiver means being operable to display information about said services on said display device, and said signaling means is operable for selecting one of said services whereupon said control means initiates billing for that one service by automatically calling one of a plurality of premium rate telephone numbers associated with respective ones of said plurality of services.
- 3 Apparatus according to claim 2, wherein the control means obtains the premium rate telephone number from data stored by the apparatus.
- 4 Apparatus according to claim 2, wherein the control means obtains the premium rate telephone number from the receiver means.
- 5 Apparatus according to any preceding claim, wherein said service comprises participation in a competition and the signaling means is operable for enabling the user to enter competition responses to the apparatus and for causing the responses to be sent to said premium rate telephone service.
- 6 Apparatus according to any preceding claim, wherein the apparatus is operable for transmitting user identification data to said premium rate telephone service.
- 7 Apparatus according to any preceding claim, wherein the apparatus is operable to receive and act upon authentication data received from said

premium rate telephone service.

- 8 Apparatus according to any preceding claim, wherein said receiver means comprises a television receiver equipped for satellite, cable or terrestrial interactive services.
- 9 Auxiliary apparatus for use in association with a television receiver or video monitor to make an electronically distributed service available to a user, the auxiliary apparatus comprising a computer system and respective means for connecting the apparatus to said television receiver or video monitor, to a telephone line and to a user operable signaling means, the auxiliary apparatus being operable for:-
 - displaying information about said service on the screen of the television receiver or video monitor;
 - receiving via the said signaling means a signal indicative of a requirement to receive said service;
 - responding to said signal to initiate provision of said service and the automatic dialing of a premium rate telephone number for resulting in payment for said service.
- 10 Auxiliary apparatus according to claim 9, wherein the apparatus comprises a unit, for example a set top box, for adapting a television set to receive a cable, satellite or digital terrestrial broadcast service.
- 11 A method for causing television apparatus to become operable to for enabling a service provider to charge for the provision of an electronically distributed service, the apparatus comprising a computer system and respective means for connecting the apparatus to a television receiver or video monitor, to a telephone line and to user operable signaling means, and the method comprising downloading programming data to the computer system to cause the apparatus to become operable for displaying information about said service on the screen of the television receiver or video monitor, receiving a signal from the signaling means indicative of a requirement by the user to receive said service, and responding to said signal to initiate the provision of said service and automatically dial a premium rate telephone number for resulting in a payment for said service.



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Claims searched: 1-11

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Search Report under Section 17

Databases searched:

UK Patent Office collections, including GB, EP, WO & US patent specifications, in:

UK CI (Ed.R): H4K (KF42, KF50A, KF50E, KF50X)

Int CI (Ed.7): H04M (3/42, 3/50, 15/00)

Other: Online : wpi ; epodoc ; japiro

Documents considered to be relevant:

Category	Identity of document and relevant passage	Relevant to claims
A	GB 2 341 748 A (Warmate)	
A	WO 00/33557 A1 (Heering)	
A	WO 99/00770 A1 (Intelligent Creations)	
A	WO 97/24826 A2 (Northern Telecom)	
X,P	US 5 978 775 (Lucent) - see abstract	1-11

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